

What is claimed is:

1. An immunogenic composition comprising a biocompatible microparticle and at least one peptide which is an amino acid sequence subunit of glucosyltransferase of 15 - 22 amino acids in length comprising an amino acid sequence selected from the group consisting of: SEQ ID NO: 1; SEQ ID NO: 2; SEQ ID NO: 10; SEQ ID NO: 11; SEQ ID NO: 12; SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; and SEQ ID NO: 19.

2. An immunogenic composition comprising a biocompatible microparticle and at least one peptide consisting essentially of SEQ ID NO: 3.

3. An immunogenic composition comprising a biocompatible microparticle and a macromolecular structure, said structure comprising a peptidyl core matrix comprising at least one amino acid selected from the group consisting of a lysines, arginine, and histidine residue; and at least two glucosyltransferase polypeptides covalently attached to said peptidyl core amino acid, wherein said glucosyltransferase polypeptides are selected from the group consisting of SEQ ID NO: 1; SEQ ID NO: 2; SEQ ID NO: 10; SEQ ID NO: 11; SEQ ID NO: 12; SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; and SEQ ID NO: 19.

4. An immunogenic composition comprising a biocompatible microparticle and a radially branched macromolecular structure, said structure comprising a peptidyl core matrix comprising at least 3 amino acids selected from the group consisting of a lysines, arginine, and histidine residue; and at least 4 glucosyltransferase polypeptides, each polypeptide of which is covalently attached to and radially branched about said peptidyl core amino acid, wherein said glucosyltransferase polypeptides are selected from the group consisting of SEQ ID NO: 1; SEQ ID NO: 2; SEQ ID NO: 10; SEQ ID NO: 11; SEQ ID NO: 12; SEQ ID NO: 13; SEQ ID NO: 14; SEQ ID NO: 15; SEQ ID NO: 16; SEQ ID NO: 17; SEQ ID NO: 18; and SEQ ID NO: 19.